

App. No.: 09/776,232  
Filed: February 2, 2001

### LISTING OF THE CLAIMS

1-37. (Cancelled)

38. (Previously presented) A method of inducing a CTL response in a mammal,

which method comprises:

delivering a liquid comprising an antigen directly to a lymph node or lymph vessel of the mammal at a level sufficient to induce a CTL response in the mammal; and maintaining the antigen in the mammal's lymphatic system over time sufficient to induce the CTL response.

39. (Previously presented) The method of Claim 38, wherein the antigen is delivered directly to a lymph node.

40. (Previously presented) The method of Claim 38, wherein the antigen comprises a protein or peptide.

41. (Previously presented) The method of Claim 38, wherein the antigen is delivered in a single bolus.

42. (Previously presented) The method of Claim 38, wherein the antigen comprises a microorganism.

43. (Previously presented) The method of Claim 38, wherein the antigen is delivered in the form of a nucleic acid encoding the antigen.

44. (Previously presented) The method of Claim 43, wherein said nucleic acid is plasmid DNA in a formulation comprising about 1-10% ethyl alcohol, 0-1% benzyl alcohol, 0.25-0.5mM EDTA and a citrate-phosphate buffer of pH 7.4-7.8, comprising about 3-50mM citrate and about 90 -200mM phosphate.

45. (Previously presented) A method of inducing a CTL response in a mammal, which method comprises:

delivering a liquid comprising an antigen in a continuous, repeated, or sustained manner directly to a lymph node or lymph vessel of the mammal at a level sufficient to induce a CTL response in the mammal; and maintaining the antigen in the mammal's lymphatic system over time sufficient to induce the CTL response.

46. (Previously presented) The method of Claim 45, wherein induction of cytotoxic T lymphocytes is obtainable independent of immunopotentiator.

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47. (Previously presented) The method of Claim 46, wherein the antigen is delivered with a cytokine.

48. (Previously presented) The method of Claim 46, wherein the antigen is delivered in the form of a nucleic acid encoding the antigen.

49. (Previously presented) The method of Claim 45, wherein the antigen is provided as a component of a microorganism cell, and wherein said microorganism cell comprises a recombinant nucleic acid encoding or promoting expression of said antigen.

50. (Previously presented) The method of Claim 45, wherein the CTL response comprises an immunological CTL response.

51. (Previously presented) The method of Claim 45, further comprising obtaining a sustained CTL response in the mammal and detecting a CTL response in the mammal.

52-59. (Cancelled)

60. (Previously presented) The method of Claim 38, wherein said delivering step further comprises delivering said liquid directly to the lymph node or lymph vessel of the mammal from a device external to the mammal.

61. (Previously presented) The method of Claim 45, wherein said delivering step further comprises delivering said liquid directly to the lymph node or lymph vessel of the mammal from a device external to the mammal.

62. (Previously presented) The method of Claim 38, wherein the antigen is delivered continuously over a period of time.

63. (Previously presented) The method of Claim 38, wherein the antigen is selected from the group consisting of a peptide, a polypeptide, a polyepitope amino acid sequence, and a protein.

64. (Previously presented) The method of Claim 38, wherein the antigen is a component or lysate of a microorganism or mammalian cell.

65. (Previously presented) The method of Claim 38, wherein the antigen is provided as a vector carrying and/or conferring expression of the antigen.

66. (Previously presented) The method of Claim 65, wherein the vector is selected from the group consisting of a bacterium, a virus, a protozoan, and a professional antigen-presenting cell.

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67. (Previously presented) The method of Claim 66, wherein the vector is a dendritic cell.

68. (Previously presented) The method of Claim 45, wherein the antigen is selected from the group consisting of a peptide, a polypeptide, a polyepitope amino acid sequence, and a protein.

69. (Previously presented) The method of Claim 45, wherein the antigen is a component or lysate of a microorganism or mammalian cell.

70. (Previously presented) The method of Claim 45, wherein the antigen is provided as a vector carrying and/or conferring expression of the antigen.

71. (Previously presented) The method of Claim 70, wherein the vector is selected from the group consisting of a bacterium, a virus, a protozoan, and a professional antigen-presenting cell.

72. (Previously presented) The method of Claim 71, wherein the vector is a dendritic cell.

73. (Previously presented) The method of Claim 45, wherein the antigen comprises a microorganism.

74. (New) The method of Claim 38, further comprising the step of selecting a patient in need of treatment for a disease condition, wherein the CTL response is specific to an antigen associated with said condition.

75. (New) The method of Claim 38, wherein the antigen is a disease-matched antigen.

76. (New) The method of Claim 45, further comprising the step of selecting a patient in need of treatment for a disease condition, wherein the CTL response is specific to an antigen associated with said condition.

77. (New) The method of Claim 45, wherein the antigen is a disease-matched antigen.